

Performance-Adjusting Device for Inertia Sensor

Abstract

5 A performance-adjusting device for inertia device is constructed by both
suspension structure and micro-electroplating structure. The suspension
structure may be manufactured by surface micromachining technique of
sacrificial layer process or bulk micromachining technique incorporating
10 with thin film process. One side of the suspension structure is arranged
firmly to a supporting piece, such that another side of the suspension
structure is shown as a suspension state. The suspension side of the
suspension structure is made as micro-electroplating structure through the
micro-electroplating process and is functioned as inertia mass for an inertia
15 sensor. The size of the micro-electroplating structure may be changed
through the micro-electroplating process, such that the inertia sensor may be
adapted for sensing in different levels. Furthermore, a microstructure of
high aspect-ratio may be achieved by taking the advantage of a metal during
the selection of a processing material, such that the objective for lateral
sensing or driving signal may be fulfilled.

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